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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,741	10/20/2003	Yukio Umemura	062709-0114	9262

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WASHINGTON, DC 20007

EXAMINER
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WEINSTEIN, LEONARD J

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

10/687,741

Applicant(s)

UMEMURA, YUKI

Examiner

Leonard J. Weinstein

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-13 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/20/03&01/16/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been placed in the file.

### ***Specification***

2. The disclosure is objected to because of the following informalities: applicant has referred to incorrect article numbers on line 12 of page 7 article number 4 should be article number 1, line 14 of page 7 article number 6 should be article number 36, and on line 1 of page 14 article number 21B should be article number 12B.

Appropriate correction is required.

### ***Drawings***

3. The drawings are objected to because Figure 9 is incorrectly described on lines 15-16 of page 5. Figure 9 is in fact a sectional view of the power transmission taken along IX-IX in Figure 8, not along IV-IV. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several

views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

4. Claims 1-13 are objected to because of the following informalities: use of the terminology "one member" and "other member" does not sufficiently describe what applicant considers a component of the claimed invention. It is suggested that the applicant use terms such as "a 1<sup>st</sup> protrusion of the driven member" or "a 2<sup>nd</sup> protrusion of the drive member" within the claims of the claimed invention. This will add clarity to specifically what the claimed invention is. Applicant is also advised to add structural details with regards to the components referred to as "one member" and "other member" in claims 1-13. Appropriate correction is required.
5. Claim 13 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 10. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hatakeyama US Patent No. 5,944,156. Hatakeyama '156 discloses all the limitations of claims 1-4, and 12 including: a power transmission for a compressor, comprising: a driven member rotatable by an engine (Hatakeyama- Figure 2A, article 35); a drive member rotatable coaxially with the driven member to rotate a shaft of a compressor for regulating displacement of the compressor (Hatakeyama- Figure 2A, article 36); and a link interconnecting the driven member and the drive member with each other in a crossing direction relative to the drive shaft (Hatakeyama- Figure 2A, article 39), the link being disengageable from one member of the driven member and the drive member (Hatakeyama- Column 1, lines 54-60); a link rotatably mounted to the other member of the driven member and the drive member (Hatakeyama- Figure 2B, article 38); the other member having a locking member configured to lock with the link disengaged from the one member (Hatakeyama- Figure 2A, article 39A); a locking member including a resilient member slidably pressing the link against the other member (Hatakeyama- Figure 2A, article 37A); and the power transmission, wherein

links are arranged about the shaft at an equal angular interval (Hatakeyama- Figure 2B, article 39). Figures 2A and 2B of Hatakeyama '156 are provided on the following page.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5-8, and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakeyama US Patent No. 5,944,156 in view of Kishibuchi et al. US Patent No. 5,683,299 and Miller et al. US Patent No 2,673,633.

With regards to claim 5, Hatakeyama '156 does teach a power transmission according to claim 1, wherein the one member includes a first engagement member (Hatakeyama- Figure 2B, article 39A), and the other member of the driven member and the drive member includes a second engagement member (Hatakeyama- Figure 2A, article 39B), and a link having a second hole fitted with the second engagement member. However Hatakeyama '156 does not teach a link that includes a first hole with the first engagement member, or a guide extending from the first hole to an end edge of the link. Kishibuchi et al. '299 does teach a hole with the void between articles 13a and 13b, as shown in Figure 2, which is fitted for an engagement member, article 6 in Figure 2, which is mounted onto the drive member, article 11 of figure 1. Miller et al. '633 teaches a guide extending from the first hole to an end edge of the link with

article 30 in Figure 3 that provides a track for the engagement member, article 31 of Figure 3, to move along during operation. Miller et al. '633 and Kishibuchi et al. '299 as applied to Hatakeyama '156 would provide for a link having a first hole that receives an engagement member that is mounted onto the drive member with a guide that allows the engagement member to slide along the end edge of the link into the correct position.

With regards to claims 6-8 and 11 according to claim 5, Hatakeyama '156 does teach a link interposed between the driven member and the drive member but does not teach a first engagement member that is deformable. Hatakeyama '156 does teach a first engagement member that is integrated with the one member, and the second engagement member is integrated with the other member but not according to claim 5. Hatakeyama '156 teaches a link with an engagement member that slides along a guide (Hatakeyama – Figure 2B, articles 40 and 37A) but not one that passes through the guide to disengage from the link as is shown by Kishibuchi et al. '299 (Kishibuchi et al. – Figure 7, articles 13a, 13b, and 7). Miller et al. '633 and Kishibuchi et al. '299 as applied to Hatakeyama '156 would provide for a deformable first engagement member (Kishibuchi et al. – Figure 7, article 7), a first engagement member that is integrated with the one member (Kishibuchi et al. – Figure 2), and second engagement member is integrated with the other member (Hatakeyama – Figure 2B, article 38) according to claim 5. In addition Kishibuchi et al. '299 and Miller et al '633 as applied to Hatakeyama

would provide for a first engagement member that passes through a guide to disengage the drive member from the driven member.

With regards to claim 10 in accordance with claim 1, Hatakeyama '156 does not teach a link that is deformable according to claim 1 of the claimed invention. Kishibuchi et al. '299 does teach a link that is deformable with articles 13a and 13b in Figure 7 that deform as the engagement member, article 6, passes through. Hatakeyama '156 in further combination with Kishibuchi et al. '299 and Miller et al. '633 would provide all the limitations as recited in claim 10 of the claimed invention.

The motivation for combining Hatakeyama '156 with Kishibuchi et al. '299 and Miller et al. '633 would be to provide for a torque responsive clutch within a power transmission that disengages at a predetermined torque load with reasonable reliability and having a link fitted with a first and second hole that would allow for a reduction in parts and complexity of the power transmission. Therefore it would have been obvious, to one of ordinary skill in the art, to apply Kishibuchi et al. '299 and Miller et al. '633 as stated above to Hatakeyama.

10. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakeyama US Patent No. 5,944,156 in view of Montigrand US Patent No. 1,865,559. Hatakeyama '156 does not teach the link including plates of an identical shape and dimension stacked on each other. Montigrand '559 does show identical lines lined up on top of one another in Figure 3 with article 1. The motivation for combining Montigrand '559 with Hatakeyama would have been to enhance the reliability of the torque responsive



power transmission. In the event that a linkage was damaged during operation the redundancy of identical linkages position on top of each other would allow for proper operation for a period time before a repair could be made. Therefore, it would have been obvious, to one of ordinary skill in the art, to combine Montigrand '559 with Hatakeyama as described.

### ***Conclusion***

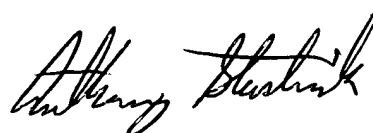
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and are cited on form 892 herewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. Weinstein whose telephone number is 571-272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJW



ANTHONY D. STASHICK  
PRIMARY EXAMINER